



# The Capitol Hill Monitor



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## TOUR PLANNED OF PG 9-1-1

As we go to print, we are in the process of scheduling a tour of the Prince George's County 9-1-1 center at 7911 Anchor Street in Landover, MD around March 12 or 13. For details please contact Alan (contact info on last page of this issue).

## CHANGES UNDERWAY FOR MD EMS COMMUNICATIONS

For more than two decades, ambulances and medics in the Baltimore area needing to speak to a physician did so with the assistance of the Emergency Medical Resources Center (EMRC). EMRC is a communication center on the University of Maryland at Baltimore campus whose primary mission is to provide a link between medical facilities and EMS units in the field in what's called EMS Region 3. The region covers Anne Arundel, Baltimore, Baltimore City, Carroll, Harford and Howard counties.

It is somewhat of a foreign idea elsewhere in the state - where one dispatch facility usually handles medical consultations along with other communication functions.

Several months ago, EMRC completed its move to a new facility about a block away at 653 West Pratt Street. Much of the former equipment was still usable, and the new facility, with its new consoles, had space available. So a plan was approved to add a console to serve the Washington area, known as EMS Region 5. As soon as the upgrades are completed, the West Pratt Street facility will house Region 3 EMRC, Region 5 EMRC, and Systems Communication (SysCom). SysCom is the communication hub for MSP helicopter dispatch, coordination and monitoring.

Hopefully by the time you read this, microwave links will connect the West Pratt Street facility to

antenna sites in Prince George's County. Region 5 EMRC will initially start by providing medical consults for medic units in Prince George's County, then expand to all EMS units in the county. This was to have started in January, but progress has been hampered due to problems with several Bell Atlantic circuits. By the end of the year, the plan is to have Region 5 EMRC serve all of Region 5, which includes Calvert, Charles, Montgomery, Prince George's and Saint Mary's counties.

Like Region 3 EMRC, the Region 5 EMRC will be a "medical consultation clearinghouse" for ambulance-to-hospital communication. Region 5 EMRC will be able to handle three simultaneous radio consults over the med channels, phone patches, and two simultaneous consultations on each planned or existing 800 MHz system in the region.

EMS units with multiple victims can be patched through to several receiving hospitals simultaneously by EMRC. For trauma center consultations, EMRC operators will route the call to SysCom. EMRC, by the way, is also the state's reference source for anti-venom.

Only medical consultations will go through EMRC. The county-operated emergency operations centers in Region 5 will continue to dispatch, communicate and maintain status of their EMS units, clear calls, perform routine hospital notifications, work in conjunction with SysCom for helicopter dispatch, monitor hospital diversion status for EMS units and will remain the central communications link for each ambulance and medic unit. The existing centers will also serve as a backup for Region 5 EMRC.

Towers covering Prince George's County will expand from three to seven, with upgraded equipment. The existing sites are at Dysons (off Route 301, near Charles County), District Heights and Greenbelt. An automatic voting system with additional sites at Mount Hope (Calvert), Woodside (Georgia Avenue), Burtonsville, Crownsville and LaPlata will enhance coverage. Presently a dispatcher at Prince George's County's Central Communications Facility

manually selects the best tower for each medical consultation.

Region 5 EMRC will consist of a dedicated console for the area. It will be staffed 24 hours a day, every day. While physically located in Baltimore as part of the central communications center that includes Region 3 EMRC and SysCom, it will be dedicated to coordinating consultations between Region 5 providers and Region 5 hospitals and other specialty centers.

All Maryland hospital emergency departments have EMS communication capability. While county policies determine the actual consultation centers, the receiving hospital can be included in the consultation. Key hospitals in the District, including Children's National Medical Center, MedSTAR, Georgetown and Greater Southeast Community, will be part of the communications network and can be part of a multi-facility consultation. Multiple medical facilities (consulting, receiving, specialty) may all be simultaneously linked with the field provider to make the optimum choices for the patient.

Region 5 EMRC will have its own regionwide med channels. They will be used in the traditional manner, in duplex mode with the mobile side of the conversation 5 MHz higher. For example, the base will be heard on 463.0 while the mobile communicates on 468.0. The Region 5 channels will employ the CTCSS assigned to the District of Columbia, 192.8 Hz (Tone "D"), on the four channels listed below. The District will retain use of Meds 6, 3 and 8. Initial contact with the Region 5 EMRC operator will be made on Call 2, where the operator will refer the field unit to med channel 1, 2 or 5.

Proposed Region 5 EMRC Frequencies  
463.0000/468.0000 Med 1  
463.0250/468.0250 Med 2  
463.1000/468.1000 Med 5  
462.9750/467.9750 Med 10 (Call 2)



## AMTRAK POLICE: Protecting a Nation in Transit

by Alan Henney (henney@doubled.com)

The National Railroad Passenger Corporation, better known as Amtrak, is American's intercity passenger rail system. Amtrak operates approximately 220 intercity trains over 24,000 miles of rail lines, serving more than 480 communities in every state but five in the continental United States. Each year Amtrak carries approximately 35 million passengers on its intercity trains and approximately 15 million metropolitan commuters.

The Amtrak Police Department (APD) was established to protect the life and safety of passengers and employees, and to protect Amtrak property. APD is charged with preserving the peace, ensuring the security of Amtrak's fiscal and material assets and the funds of the United States government in the custody of Amtrak.

Amtrak police officers are duly appointed law enforcement officers under state and federal statutes. As such, they have the power and the sworn duty to preserve the peace, detain or arrest offenders, and enforce laws pertaining to crimes committed against Amtrak employees, passengers and property.

APD is divided into three major components: Office of the Chief of Police, Field Operations Bureau, and the Headquarters Operations Bureau.

The chief is responsible for the administration and operation of the department. The chief's office also includes the offices of professional standards, community relations, and special projects.

The deputy chief of the Field Operations Bureau is responsible for all uniformed patrol and non-specialized investigations. The FOB is headquartered at Amtrak's 30th Street Station in Philadelphia.

The deputy chief of the Headquarters Operations Bureau is responsible for the Strategic Planning and Investigations Unit, Administrative Services Unit, and the Inspectional Services Unit.

APD employs one captain who oversees the Mid-Atlantic South Division. This division includes both Washington (south to Florida) and Baltimore. In ad

dition, a lieutenant is stationed in Washington and Baltimore, respectively.

Most APD officers carry Motorola MTS2000 hand-held radios. The radios consist of seven zones with 16 channels each. The zone for the Baltimore-Washington region includes channels for Amtrak road, CSD (anybody know what that is?), a patrol repeater, maintenance of way, and channels to access the APD repeaters at Wilmington, Perryville, Chase, Baltimore, Severn, Ivy City and Washington (Union Station).

Also included in the same bank is a car-to-car channel, the Harrisburg road channel, the Philadelphia APD repeater, the CID repeater and the national law enforcement mutual aid frequency. Note what appears to be an on-train low-power repeater system on 173.375. Thanks to Scott Glazer for his contributions to this article.

Z C Zne Channel Receive Transmit Rx PL Tx PL

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1 1 PHL AMT RD 160.9200 160.9200 CSQ 146.2  
1 2 PHL HBG RD 160.6350 160.6350 CSQ CSQ  
1 3 PHL CSD 160.6500 160.6500 146.2 146.2  
1 4 PHL MW RPT 160.5150 161.1150 CSQ 146.2  
1 5 PHL MW RPT 160.5150 160.5150 CSQ CSQ  
1 6 PHL PTL RPT 173.3750 173.3750 203.5 203.5  
1 7 PHL PHL RPT 161.2950 160.3650 114.8 114.8  
1 8 PHL RACE RPT 161.2950 160.3650 107.2 107.2  
1 9 PHL WIL RPT 161.2950 160.3650 88.5 88.5  
1 10 PHL PAOLI 161.2950 160.3650 131.8 131.8  
1 11 PHL CAR-CAR 161.2050 161.2050 CSQ 146.2  
1 12 PHL CID PTL 160.8300 160.2150 CSQ 123.0

2 1 HBG AMT RD 160.9200 160.9200 CSQ 146.2  
2 2 HBG HBG RD 160.6350 160.6350 CSQ CSQ  
2 3 HBG CSD 160.6500 160.6500 146.2 146.2  
2 4 HBG MW RPT 160.5150 161.1150 CSQ 146.2  
2 5 HBG MW SPX 160.5150 160.5150 CSQ CSQ  
2 6 HBG PTL RPT 173.3750 173.3750 203.5 203.5  
2 7 HBG HBG RPT 161.2950 160.3650 88.5 88.5  
2 8 HBG LNC RPT 161.2950 160.3650 100.0 100.0  
2 9 HBG GAP RPT 161.2950 160.3650 131.8 131.8  
2 10 HBG PAOLI 161.2950 160.3650 156.7 156.7  
2 11 HBG PHL RPT 161.2950 160.3650 114.8 114.8  
2 12 HBG CAR-CAR 161.2050 161.2050 CSQ 146.2  
2 13 HBG LNC CITY 154.8750 159.0300 71.9 71.9  
2 14 HBG W DNLGL 158.8050 158.8050 71.9 71.9

3 1 WIL AMT RD 160.9200 160.9200 CSQ 146.2  
3 2 WIL MW RPT 160.5150 161.1150 CSQ 146.2  
3 3 WIL MW SPX 160.5150 160.5150 CSQ CSQ  
3 4 WIL PTL RPT 173.3750 173.3750 203.5 203.5  
3 5 WIL PHL RPT 161.2950 160.3650 114.8 114.8  
3 6 WIL WIL RPT 160.5150 160.5150 CSQ CSQ  
3 7 WIL PVL RPT 161.2950 160.3650 100.0 100.0  
3 8 WIL CAR-CAR 161.2050 161.2050 CSQ 146.2  
3 9 WIL DEL 4 154.6950 154.6950 CSQ 123.0  
3 10 WIL DEL 7 155.4750 155.4750 CSQ CSQ  
3 11 WIL DEL 8 154.8600 154.8600 CSQ CSQ

4 1 NY AMT RD 160.9200 160.9200 CSQ 146.2  
4 2 NY MW SPX 160.5150 160.5150 CSQ CSQ  
4 3 NY PTL RPT 173.3750 173.3750 203.5 203.5  
4 4 NY RACE RPT 161.2950 160.3650 107.2 107.2  
4 5 NY MVL RPT 161.2950 160.3650 100.0 100.0  
4 6 NY ADAMS RPT 161.2950 160.3650 88.5 88.5  
4 7 NY MET RPT 161.2950 160.3650 94.8 94.8  
4 8 NY NYP RPT 161.2950 160.3650 131.8 131.8  
4 9 NY 125TH ST 161.2950 160.3650 94.8 94.8  
4 10 NY W-S SPX 160.5150 160.5150 94.8 94.8  
4 11 NY SSY RPT 161.2950 160.3650 156.7 156.7  
4 12 NY CAR-CAR 161.2050 161.2050 CSQ 146.2  
4 13 NY NJT PD 160.8300 160.2150 CSQ 123.0  
4 14 NY NJT CAR 160.8300 160.8300 CSQ 123.0  
4 15 NY NJ SPEND 155.4750 155.4750 CSQ CSQ  
4 16 NY CID RPT 173.3750 173.3750 CSQ 146.2

5 1 BOS AMT RD 160.9200 160.9200 CSQ 146.2  
5 2 BOS MW SPX 160.5150 160.5150 CSQ CSQ  
5 3 BOS MW RPT 160.5150 161.1150 CSQ 146.2  
5 4 BOS PTL RPT 173.3750 173.3750 203.5 203.5  
5 5 BOS BOS RPT 161.2950 160.3650 156.7 156.7  
5 6 BOS ATL RPT 161.2950 160.3650 88.5 88.5  
5 7 BOS PVD RPT 161.2950 160.3650 100.0 100.0  
5 8 BOS KIN RPT 161.2950 160.3650 114.8 114.8  
5 9 BOS WESTERY 161.2950 160.3650 192.8 192.8  
5 10 BOS NLC RPT 161.2950 160.3650 131.8 131.8  
5 11 BOS CLINTON 161.2950 160.3650 156.7 156.7  
5 12 BOS NHV RPT 161.2950 160.3650 88.5 88.5  
5 13 BOS BERLIN 161.2950 160.3650 107.2 107.2  
5 14 BOS HFD RPT 161.2950 160.3650 100.0 100.0  
5 15 BOS SPG RPT 161.2950 160.3650 114.8 114.8  
5 16 BOS CAR-CAR 161.2050 161.2050 CSQ 146.2

6 1 BAL AMT RD 160.9200 160.9200 CSQ 146.2  
6 2 BAL CSD 160.6500 160.6500 146.2 146.2  
6 3 BAL PTL RPT 173.3750 173.3750 203.5 203.5  
6 4 BAL MW SPX 160.5150 160.5150 CSQ CSQ  
6 5 BAL WIL RPT 161.2950 160.3650 88.5 88.5  
6 6 BAL PVL RPT 161.2950 160.3650 100.0 100.0  
6 7 BAL CHASE RPT 161.2950 160.3650 94.8 94.8  
6 8 BAL BAL RPT 161.2950 160.3650 156.7 156.7  
6 9 BAL SEV RPT 161.2950 160.3650 131.8 131.8  
6 10 BAL IVY RPT 161.2950 160.3650 88.5 88.5  
6 11 BAL WAS RPT 161.2950 160.6650 192.8 192.8  
6 12 BAL CAR-CAR 161.2050 161.2050 CSQ 146.2  
6 13 BAL HBG RD 160.6350 160.6350 CSQ CSQ  
6 14 BAL PHL RPT 161.2950 160.3650 114.8 114.8  
6 15 BAL CID RPT 173.3750 173.3750 CSQ 146.2  
6 16 BAL MUTUAL AID 155.4750 155.4750 CSQ CSQ

7 1 GEN AMT RD 160.9200 160.9200 CSQ 146.2  
7 2 GEN MW SPX 160.9200 160.9200 CSQ 146.2  
7 3 GEN CAR-CAR 160.9200 160.9200 CSQ 146.2  
7 4 GEN PTL RPT 173.3750 173.3750 203.5 203.5  
7 5 GEN CID RPT 173.3750 173.3750 CSQ 146.2  
7 6 GEN PD A 161.2950 160.3650 88.5 88.5  
7 7 GEN PD B 161.2950 160.3650 100.0 100.0  
7 8 GEN PD C 161.2950 160.3650 114.8 114.8  
7 9 GEN PDD 161.2950 160.3650 131.8 131.8  
7 10 GEN PDE 161.2950 160.3650 156.7 156.7  
7 11 GEN PDF 161.2950 160.3650 94.8 94.8  
7 12 GEN PG G 161.2950 160.3650 192.8 192.8  
7 13 GEN PD H 161.2950 160.3650 107.2 107.2  
7 14 GEN WX-1 162.4000 --- CSQ ---  
7 15 GEN WX-2 162.4750 --- CSQ ---  
7 16 GEN WX-3 162.5500 --- CSQ ---

## RECOM TOUR: Another EOC Tour

by John Korman (pageme@UDel.Edu)

I am amazed how each state and county agency has such different operating procedures. Being a criminal justice major in college and wanting to pursue a career in emergency communications, I went online and found people who worked in the New Castle County, Delaware, Emergency Communications Center. Lo and behold, I found myself touring the spacious room, dubbed "ReCom," which is partitioned in thirds by walls.

On one side is "Fireboard," which handles all fire & EMS calls. In the middle are the call-takers, who handle all incoming enhanced 9-1-1 calls, and on the other side sit the police dispatchers for New Castle County and Delaware State Police Troops 1, 6 and 9 (NCC branch).

All 9-1-1 calls within New Castle County are answered in this building just south of Wilmington. The caller does not choose to have the county or state police respond, rather, the call is directed to the proper police agency depending upon the location of the incident. Unlike the Washington, DC area, where state police primarily patrol the highways, in Delaware, state police patrol state and county roadways in addition to the larger highways like I-95, I-495 and I-295. A single call to 9-1-1 routes the call to the proper dispatcher.

All call-takers are county employees as are the dispatchers for "Fireboard." The police dispatchers, however, are either with the county or state. Unlike the police division, fireboard dispatchers are cross-trained as call-takers (from the original "police" call-takers) as well as dispatchers. On the police division, dispatchers tend to make more money and were usually call-takers at one time. County employees work two 12-hour days, two 12-hour nights, and then are off four days. State employees (dispatchers) have set shifts, 2 p.m. to 10 p.m., for example.

At the time of an incoming call, the call-taker determines if the incident is police, fire, or EMS related. If it is a police matter, the call-taker and caller stay on the line. If the incident is a fire or EMS matter, the call is transferred to "Fireboard" at the press of a button with the original call-

taker staying on the line (three-way). An emergency medical dispatch (EMD) is done by "Fireboard" and should the incident require a police response as well (such as an assault, CPR in progress, or DOA call), "Fireboard" and the original "police" call-taker can draw up an incident type and their own numbers simultaneously.

Up to six call-taking consoles are in the middle section of the center. When a call-taker is at a console or is leaving, the person must log-on and log-off. Each console has one 9-1-1 incoming line, one non-emergency line, and two other dedicated lines. Therefore, a computer assigns an incoming call (9-1-1 or non-emergency) to a specific console in a "round robin" to help distribute the flow of calls.

Both DSP and the county police tend to use two primary channels each - a "duty" channel for primary dispatching, and a "data" channel (for running wanted checks). On busy nights, however, both agencies may use two primary dispatch channels in addition to a data channel. The state's 800 MHz Motorola Astro system is now in use by all three agencies. Most state, county, and municipal agencies within the state are expected to join the 800 MHz trunked system sometime soon.

I thoroughly enjoyed my eight-hour visit at the county ECC. I spoke with call-takers and dispatchers who have been with the center for up to 15 years! It was a great experience and another agency I can compare to other ECCs I visit. While not in school, John is a Montgomery County resident and volunteer at the Rockville fire department. Thanks to Mark Whitlock and Ed Marecki of the New Castle County ECC for showing him around.

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## I Wanna Armchair Foxhunt but I Don't Have a DF Loop!

by Frank Carson (frcarson@idt.net)

This came up at an amateur radio club meeting when we started talking about doing an armchair foxhunt (tracking down the source of a radio signal). Heck, you don't need a loop to DF (distance find), or even one of those nifty DF kits that a lot of us bought (okay, they make things easier, but who

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wants that!). You don't even need an HT or transceiver - a scanner will work just fine. Really, all you're trying to do is null the signal so you can find where it ISN'T to find out where it IS. There are a couple of ways to do that. Let's talk about an HT first (this also applies to a scanner).

There are a few ways to null or block a signal that's coming into an HT with a rubber ducky. A loop just has better reception qualities on two "sides" than the other "sides". So, to simulate this same thing, block the signal's arrival to the antenna in all but one area. You can do this a few ways.

The least expensive method is to use the body block technique. It's pretty self explanatory - hold the receiver close into your body and turn with the receiver. Your body blocks the signal, and you can localize the strongest signal. In this method it's best to use headphones or an earpiece, as the receiver's speaker is either against your body or pointing away from you. Headphones or an earpiece work best with all of these methods by blocking external noises so you can hear the signal better.

A cheap technique is to cover the HT with heavy-duty aluminum foil (including the antenna), except for the front of the radio. The aluminum blocks the signal rather well. I tried this method before I wrote this piece, using an AR1000XLT scanner. I set it to receive 94.7 FM, since it was a strong radio signal. Using heavy-duty aluminum foil only, I was able to block most of the signal to a noticeable extent.

I found that the metal belt clip, in contact with the foil, wiped out the reception completely. So I just unscrewed the belt clip and removed it. That brings up a quick point - especially if you use a scanner or HT, you have to shield the whole scanner - body and antenna. The body of the scanner or HT will receive signals also, not just the antenna.

Ever had the urge to buy a can of Pringles (my favorite is the barbecue)? Here's a good excuse - the can is lined with aluminum foil. Get the can, eat the chips (that's one of the good parts of this project), and clean out the remaining little grease and chip bits (alcohol works ok - just put it on a

rag). Cut a long slit in one side, and cover the plastic top cap with heavy-duty aluminum foil, and put the cap back on. Now, put your HT in the can, (you may have to slightly deform the can into an oval so that it fits) and you've limited the signal to one part of the antenna. At this point you can just turn the can around to find the strongest signal. You can even cover the outside of the can with foil to further block signal.

To get a bit more elaborate (costs about \$12 for the connectors), I built a simple DF loop for my scanner out of some RG59 coax cable, two twist-on BNC connectors, and a BNC "T" connector (like you use for doing LAN work on computers). You simply put on a twist-on BNC connector on each end of the coax, and loop each end around to join with each end of the BNC "T" connector. Plug it into your portable and you're set!

This provides a pretty decent shielded-loop antenna. The twisted braid in the coax acts as a good shield. Since loops work in the magnetic component of the electromagnetic wave this shields the antenna from voltage signals and electrostatic interference. This shielding is very useful since the pattern of a normal free space loop, a "perfect figure eight", distorts when it interacts with the environment.

In some cases (aluminum siding, etc.) the interaction can be so bad that it completely distorts the pattern to the point that it's useless. In order to prevent harming the loop's ability to pick up the magnetic portion of the electromagnetic signal, you leave a gap in the shield at some point. I just used a razor to cut away the external cover of the coax, and a small pair of scissors to cut the braid away, and left about an inch gap in the shielded at the top of the loop.

Mine is about a six-inch loop, and, after trying mine to 94.7 FM, I was pretty pleased with the performance - deep nulls were produced. It's self supporting, portable, and easy to use. A few notes of caution, though. When you attach it to your portable you can spin the loop freely on the BNC connector of the receiver, however, there is some static and bad connection problems generated when you do that, due to the actual connection to the antenna circuit being turned. I found it works best if you simply turn the radio.

For the compass direction of the signal you can use a compass or you can even set your portable, with whatever system you've set up, on a lazy susan with the degrees marked off. Align the bottom tray to north, mark it, and use that to determine the direction of the signal.

How about a tabletop system for DFing? If you have a beam you can just spin the beam to get the strongest signal. No beam? You could set your tabletop receiver on a lazy susan, hook a portable antenna to it, shield the receiver and antenna, and use one of the methods above. If you can battery-power the receiver it helps a lot. The methods above work pretty much the same with portables as tabletops. With a bit of thought you could adapt a few cookie sheets as shields, or a frame of coat hangers and foil, or a pop-open Coleman camp stove, or a cardboard box covered in foil...

Happy hunting!



## SKI SCANNING AT BLUE KNOB, PA

by Ralph Johnson ([johnson@cpcug.org](mailto:johnson@cpcug.org))

I confirmed several frequencies used at the Blue Knob, Pennsylvania ski area when I skied there last year. To get a heads up on possible frequencies used at Blue Knob and reduce my search time I researched a Mr. Scanner CD-ROM database for possible frequencies. I found these frequencies listed in the database:

Blue Knob Recreation Inc. KZF342  
154.540 (Channel 1)

The National Ski Patrol  
155.220  
155.280 (Channel 2)  
155.340

My scanning confirmed these frequencies and added the following frequencies:

A strong reading for 467.98 +/- but I could not key it into my radio fast enough and it never came up again.

The ski instructors use 462.610 [probably 462.6125] to communicate and coordinate lessons.

I found 154.540 (Channel 1) and 155.280 (Channel 2) were the two frequencies actually used at Blue Knob. 155.220 is an EMS dispatch frequency used in Bedford County (where Blue Knob is located) and 155.340 is a MEDSTAR flight-for-life air-to-ground frequency used to communicate with hospitals. Evidently, for emergency uses the ski patrol is licensed to use these two frequencies.

Until approximately 10:00 a.m. all services use channel 1 but then the ski patrol goes to Channel 2 until approximately 8:00 p.m. when they go back to Channel 1. Other operations, such as the snow-making crew, continue to use Channel 1 throughout the day. At about 4:00 p.m. the ski patrol calls for a meeting of all patrol members to be held at 4:30 p.m. The patrol does not use a repeater and identifies as "Patrol." Patrol members are called by name or are asked if any patrol member is in the area of such-and-such run for assistance.

Most information is passed over the air with the exception that I will mention below. I expected a closing out of the net at 10:00 p.m. when the lifts close but I did not catch a call at that time. I may have missed the close-out call or it was blanked out when another call was coming into my scanner.

In the middle and late afternoon there were two accidents that required the use of the MEDSTAR helicopter. Around 3 p.m. a woman was injured and by 4:30 she was lifted out of the parking lot by helicopter to the Johnstown hospital. Later, about 5:30 p.m., as I was leaving, I heard another call for the helicopter. During both emergencies I monitored the use of 155.34 for air-to-ground communications involving the passage of landing coordinates, information about the injuries and the stabilizing treatments the flight nurses were using.

During the second emergency I heard the patrol dispatcher tell one of the patrol members the information the patrol member requested could not be given over the air. Instead, the patrol dispatcher instructed the member to call the dispatcher.

I enhanced my ability to scan and listen with a chest holder to hold my Pro-26 scanner. This was safer because it kept the radio off my hip so that it would not get crushed if I fell on it and it also made it easier to hear. It was comfortable and I plan to use it at other times such as running, cycling, and doing race support with my 2m transceiver, etc.

In closing, Blue Knob's location on one of the highest peaks in Pennsylvania and the frequencies used made for easy scanning. The high relief of the lodge and the use of the longer wavelength 2-m frequency compared to the 70-cm frequency at other areas enhanced transmission of the dispatch calls. I could clearly copy the ski patrol dispatcher transmissions in my motel room in Bedford - 15 miles away.

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### **OC MAKES CHANGES**

Ocean City, Maryland was recently told that it will cost \$250,000 to make its 11-channel Ericsson trunked system Y2K compliant (856.2375 and 857.2375 were recently added as the 10th and 11th channels). Articles appearing in local papers stated the city reached an agreement for less than the original quote. The Y2K upgrades include seven new dispatch consoles in the 65th Street Public Safety Building.

Rob Korb, a dispatcher, fire fighter and the fire department webmaster, says there is no plan at present to go completely digital as the cost is about \$300 more per radio. But the Y2K upgrades are said to help the city become all digital in the future. So far the city's two radio technicians and the emergency management director have the only digital radios. The radios are only "digital" when they talk to each other.

The city's fire department is in the process of switching its primary talkgroup simulcast from 46.36 to 158.895 - the city's former recreation department channel. The fire department says it also plans a simulcast of the primary fireground talkgroup, "operations 1" (talkgroup 2), on 154.085. The old public works repeater input frequency, 158.955, was also being considered for this purpose.

The interesting part is that both 158 MHz channels are mobile-only allocations. The fire department simulcast transmitters will be atop the 9400 Condominium on 94th Street (the one for 46.36 is at fire station 5). Fire talkgroups 5 and 6 will continue to cross-repeat the medevac patch and Coast Guard channels, 154.025 and 157.15. 460.425 still simulcasts the primary police talkgroup. The former beach patrol repeater, 155.37, is an emergency alert channel that allows the city's emergency management staff to more easily notify the public of emergencies and has been used for hurricane bulletins.

The anti-scanner tones are still around and can be activated as desired - especially when the Quick Response Team (QRT) is planning a raid.

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### **EDACS/MOTOROLA TRUNKTRACKER COMING SOON?**

Uniden announced a new scanner at the recent Consumer Electronics Show. It's the Bearcat 245XLT and it features TrunkTracker II technology that allows it to track both GE/Ericsson (like Ocean City's) and Motorola trunked radio systems. It also offers a "SmartScanner" feature that is supposed to allow users to download frequencies by ZIP code. The user connects the scanner to a modem with a special cable provided with the scanner. The scanner will dial into a preprogrammed, toll-free number that automatically downloads the programming. It's supposed to be available in July and will sell for around \$270.

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### **DC FIRE/EMS TRUNKED SYSTEM NOW ONLINE**

The District's fire/EMS trunked system went online during the last few days of December - meeting the Dec. 31 deadline imposed on the agency by the FCC. We have yet to observe any actual activity on the system, other than the control channel that transmits on 852.6625 and 852.6875. The Motorola system ID is 603D. From what we've been told, the system will be a mix of analog and digital IMBE. Digital Voice Systems, Inc. (DVS)

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proprietary Improved Multi-Band Excitation (IMBE) vocoder was selected by APCO for its Project 25 trunking standards.

The system will eventually operate on the department's eight 800 MHz channels, 852.6125, 852.6375, 852.6625, 852.6875, 852.7125, 852.7375, 852.7625 and 852.7875. Department insiders say the transition to the system is expected to take several months, and routine use may start sometime this summer. The fire chief told the Jan. 6 Washington Times that he hopes to have a satellite-tracking system installed in all ambulances by year's end and doesn't "anticipate any problems" receiving funding. The system would track EMS units so the closest unit could be dispatched to an emergency. The chief said the police department is requesting a similar system.

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### **PGPD MDT Update**

Prince George's County police may soon be using a mobile data system for report writing, running warrant checks and vehicle registrations. The system will not be used for dispatching. The county decided to go with a cellular-switched packet network. The state intends to charge the county \$50 per month per connection which includes access to the FBI's NCIC. With more than 800 computers planned, that's a cost of about \$40,000 a month, or \$480,000 a year. The mobile data system is out for a 30-day bid.

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### **NEWSSCAN**

**MARYLAND PARK USES VOICE RECOGNITION WITH MOBILE DATA.** Maryland-National Capital Park Police's Montgomery County Division recently implemented voice recognition technology as part of a new cellular digital packet data (CDPD) service. About 30 police cars that patrol the county's 432 parks, states the November-December Radio Resources, now have the CDPD service from Bell Atlantic Mobile.

In addition to accessing databases in the field and Internet e-mail capabilities among patrol cars and with citizens, officers are using speech recognition

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technology to speak information for reports. Stellar Technical Systems Inc. developed a voice recognition application specifically for public safety agencies using Dragon Systems' DragonDictate.

Before the mobile data system was implemented, dispatchers ran about 30,000 wanted checks a month. Dispatchers now make only about 14,000 checks, while officers in patrol cars run 37,000 checks a month. The department plans to add mobile data and voice recognition capability to 70 more patrol cars allowing all 100 county officers access to the technology.

**FAA PLANS MOVE TO VINT HILL.** The Federal Aviation Administration has chosen Vint Hill Farms Station, a former military intelligence base in Fauquier County, as the site for a \$93 million air-traffic control facility that will consolidate operations now at three Washington area airports and Andrews Air Force Base, reports the Jan. 7 Washington Post.

FAA officials said the move will improve air safety and streamline costs by putting all the controllers who handle the approaches of aircraft headed to Andrews AFB, Dulles International, Reagan National and Baltimore-Washington International airports in one location. Under the agreement, the FAA will pay \$1.66 million for a 30-acre parcel that once was an antenna field at the 700-acre base, which was closed in 1997. The FAA hopes to have the facility operating by May 2002, and 300 FAA employees eventually will be assigned there. Consolidating air-traffic control facilities that share the same airspace is a growing trend an FAA official said.

**MCI AWARDED COMMUNICATIONS CONTRACT WITH ST. MARY'S COUNTY.** On Dec 1 MCI Systemhouse announced an agreement reach with Saint Mary's County, Maryland to provide a comprehensive plan to modernize the public safety communications system. The plan represents a unique joint effort between an area local government and MCI Systemhouse, which claims to operate the only fully outsourced public safety communications system in North America. Northampton County in eastern Pennsylvania, which has a contract with MCI Systemhouse, has the first and only privatized 9-1-1 system in the United States (<http://www.northampton-e911.com>).

"Under the terms of the \$10.4 million agreement," states an MCI press release, "MCI Systemhouse will design, build and deliver all components of the emergency communications system [for Saint Mary's County]. Upon full implementation, MCI Systemhouse will provide transition assistance to county employees in daily systems operations until they can operate, manage, and maintain the operations independently." MCI Systemhouse says it will provide the following:

**FACILITIES:** MCI Systemhouse will design, fund, manage and construct a new 7,100-square-foot communications center in Leonardtown. The new facility will consolidate two former communications centers, and will implement streamlined processes for responding to emergency calls.

**EQUIPMENT:** MCI Systemhouse will coordinate, install and implement all of the technology in the newly constructed center. Included are consoles, a new radio infrastructure, enhanced 9-1-1 telephone service and other related public safety communication center technologies.

**RADIO COMMUNICATIONS:** MCI Systemhouse will install a new trunked 800 MHz radio infrastructure and radio field equipment that will provide public safety-grade coverage within the county. County public safety agencies will be able to operate on an integrated radio system.

**CONSULTING:** MCI Systemhouse will provide continual project delivery assistance in the completion of a master street address guide and geographic database, as well as the integration of public safety communications policies and procedures.

Saint Mary's County and MCI agreed to the contract outlined above in November, stated the Dec. 17 Washington Post. But when the county sent the signed contract to MCI, it was returned by MCI with a number of proposed changes. The county declined to accept any of MCI's requests.

Amidst all this, the county administrator accepted a position in South Carolina. He came under criticism by some residents for his role in the county's deal with MCI. His critics questioned his friendship with a Pennsylvania consultant who has done work for MCI Systemhouse Inc. Initially, the Dec. 13 Washington Post noted, MCI Systemhouse pro

posed a \$35 million privatized 9-1-1 system, an idea rejected by county commissioners. After months of debate, the commissioners chose a system to be built by MCI but operated by the county.

One commissioner expressed concern that the contract may force the county to buy expensive, brand-name radio equipment. But the county administrator said the agreement involved purchasing brands of radio equipment that happen to be industry standards. As a reseller of both Ericsson and Motorola equipment, an MCI Systemhouse spokeswoman says MCI gives an equal opportunity to both companies to submit competitive proposals. Ericsson, she says, was chosen by MCI as the best solution for the county's particular requirements.

The county commissioners voted 3 to 2 to direct the county's chief procurement officer to sign the contract. The MCI Systemhouse contract with the county was finalized on December 22 and is moving forward as planned.

**U.S. MILITARY RADIO EQUIPMENT CAUSING INTERFERENCE OVERSEAS.** U.S. military technology deployed overseas is disrupting telephone service in some countries and causing telecommunications glitches, annoying allies and incapacitating some weapons. "At least 89 telecommunications systems... were deployed within the European, Pacific and Southwest Asian theaters without the proper frequency certification and host-nation approval," says Defense Week quoting from a Defense Department's inspector general's report. Billions of dollars worth of equipment "cannot be utilized to its full capability... In some cases, fully functional equipment sits idle while its useful life expires," the report stated.

The Patriot missile system's radios, radars and data-link terminals have interfered with Korean cellular phones. In Germany, the report noted, infant crib monitors used on U.S. bases have clashed with German telephone service. And in Bahrain, SPS-40 and SPS-49 radars "are unusable because the equipment operates on a frequency that interferes with the Bahrain telecommunications services." Host nations are angry about the disruptions, the report added, noting that Germany has passed a law allowing it to confiscate U.S. equipment using unauthorized frequencies and to arrest its user.

Please address all correspondence to Alan. We encourage readers to submit material and write articles that relate to the hobby. All submissions are subject to editing for style and content. When submitting material please make certain we can contact you should we have any questions. We welcome frequency and visitor requests, but please include a reply envelope.

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# **The Capitol Hill Monitor**

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